United States
Department of
Agriculture

Natural
Resources
Conservation
Service

Idaho Basin Outlook Report March 1, 1998

Basin Outlook Reports
and
Federal - State - Private
Cooperative Snow Surveys

For more water supply and resource management information, contact:

Your local Natural Resources Conservation Service Office
or
Natural Resources Conservation Service
Snow Surveys
9173 West Barnes Drive, Suite C
Boise, ID 83709
(208) 378-5740

How forecasts are made

Most of the annual streamflow in the western United States originates as snowfall that has accumulated in the mountains during the winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Measurements of snow water equivalent at selected manual snowcourses and automated SNOTEL sites, along with precipitation, antecedent streamflow, and indices of the El Niño / Southern Oscillation are used in computerized statistical and simulation models to prepare runoff forecasts. These forecasts are coordinated between hydrologists in the Natural Resources Conservation Service and the National Weather Service. Unless otherwise specified, all forecasts are for flows that would occur naturally without any upstream influences.

Forecasts of any kind, of course, are not perfect. Streamflow forecast uncertainty arises from three primary sources: (1) uncertain knowledge of future weather conditions, (2) uncertainty in the forecasting procedure, and (3) errors in the data. The forecast, therefore, must be interpreted not as a single value but rather as a range of values with specific probabilities of occurrence. The middle of the range is expressed by the 50% exceedance probability forecast, for which there is a 50% chance that the actual flow will be above, and a 50% chance that the actual flow will be below, this value. To describe the expected range around this 50% value, four other forecasts are provided, two smaller values (90% and 70% exceedance probability) and two larger values (30%, and 10% exceedance probability). For example, there is a 90% chance that the actual flow will be more than the 90% exceedance probability forecast. The others can be interpreted similarly.

The wider the spread among these values, the more uncertain the forecast. As the season progresses, forecasts become more accurate, primarily because a greater portion of the future weather conditions become known; this is reflected by a narrowing of the range around the 50% exceedance probability forecast. Users should take this uncertainty into consideration when making operational decisions by selecting forecasts corresponding to the level of risk they are willing to assume about the amount of water to be expected. If users anticipate receiving a lesser supply of water, or if they wish to increase their chances of having an adequate supply of water for their operations, they may want to base their decisions on the 90% or 70% exceedance probability forecasts, or something in between. On the other hand, if users are concerned about receiving too much water (for example, threat of flooding), they may want to base their decisions on the 30% or 10% exceedance probability forecasts, or something in between. Regardless of the forecast value users choose for operations, they should be prepared to deal with either more or less water. (Users should remember that even if the 90% exceedance probability forecast is used, there is still a 10% chance of receiving less than this amount.) By using the exceedance probability information, users can easily determine the chances of receiving more or less water.

IDAHO WATER SUPPLY OUTLOOK REPORT

MARCH 1, 1998

SUMMARY

February brought an increase in snowpacks south of the Snake River as a result of the El Nino storm track from California. Elsewhere in the state, snowpack percentages remained the same as last month or decreased slightly. The highest snowpacks in the state are 100-120% of average in southern Idaho. Snowpacks across central and eastern Idaho are 85-95% of average. The lowest snowpacks are in the Panhandle and Clearwater basins about 75% of average. Projected streamflows call for 85-105% of average across most of the state with the lowest forecasts in northern Idaho. Runoff volumes will be below normal in northern Idaho but should still be adequate to meet most user needs. Southern Idaho water users will have an adequate water supply to meet numerous diverse needs.

SNOWPACK

Snowpacks increased by 20-30 percentages points in the basins south of the Snake River. The highest snowpacks in the state are along the Idaho and Utah/Nevada state line at 110-120% of average. The lowest snowpacks, typical of El Nino years, are in the Panhandle Region and Clearwater basins at three-quarters of normal. Elsewhere in the state, snowpacks are almost normal at 85-95% of average. With just over a month until the snowpack usually reaches its maximum water content for the season, the 1997-98 snow season is looking fairly "normal".

PRECIPITATION

The El Nino storm track pushed into southern Idaho bringing above normal February precipitation to southwestern Idaho while northern Idaho precipitation was only 50-60% of average. February precipitation was below normal for the fourth consecutive month in the northern third of the state. Precipitation was near normal in the Bear River and central mountains. In central and eastern Idaho, February precipitation was 70-80% of average in the Salmon and upper Snake river basins. Precipitation for the water year varies across the state and ranges from 80-95% of average. The March weather forecast provided by the National Weather Service is for above normal temperatures and below normal precipitation across central and eastern Idaho. The March-May forecast is for above normal temperatures and precipitation across the state.

NEW ADDRESS CHANGE!!!

Effective February 23, 1998, Natural Resources Conservation Service will be located at 9173 West Barnes Drive, Suite C, off of Maple Grove and Overland at the Black Eagle business complex. Our phone numbers will remain the same (208) 378-5740. Our new address is noted below.

The Universal Resource Locator (URL) for our Internet home page will remain the same: http://idsnow.id.nrcs.usda.gov

Natural Resources Conservation Service
Snow Survey Staff
9173 West Barnes Drive, Suite C
Boise, Idaho 83709
Phone (208) 378-5740
Email snow@id.nrcs.usda.gov

RESERVOIRS

Reservoirs across Idaho are in good shape: some reservoirs are being drafted to maintain adequate space while others are storing or passing inflow. Storage in the natural lakes in northern Idaho is about half of their summer capacity which is normal for this time of year. Dworshak Reservoir is 66% full which is above average and it should fill depending upon timing of inflows and releases. Other reservoirs across southern and eastern Idaho, with the exception of Oakley and Salmon Falls reservoirs, are 70-85% full and are expected to fill. Oakley Reservoir is 56% full and Salmon Falls Reservoir is 42% full; these reservoirs are not expected to fill unless summer runoff volumes are greater than the 10% Chance of Exceeding Forecast.

Note: NRCS reports reservoir information in terms of usable volumes, which includes both active, inactive, and in some cases dead storage. Other operators may report reservoir contents in different terms. For additional information, see the reservoir definitions in this report.

STREAMFLOW

Streamflows are forecast at near normal volumes across the southern half of Idaho and about three-quarters of average in northern Idaho. Forecasts increased slightly from last month in some southern and eastern Idaho streams and decreased slightly in northern Idaho. Summer streamflow forecasts are the lowest in the Panhandle Region and Clearwater River basin at 70-80% of average. The Salmon River is forecast at 93% of average. Central, southern and eastern Idaho streams are projected at 85-105% of average with the exception of the Big Wood River and Salmon Falls Creek which are forecast at about 75% of average. There is still the potential for high peak flows, but volumes will be much less than last year. Spring temperatures and precipitation will determine when the snow starts melting and timing and magnitude of streamflow peaks.

RECREATION

Winter recreationists have plenty of snow to enjoy in the high country. Snow levels are near or above normal across the southern two-thirds of the state and three-quarters of normal in the northern third. Cold mountain temperatures have kept snow densities low and precipitation falling as snow and not rain. All major reservoirs are expected to fill providing excellent and early reservoir recreational opportunities. Streamflow forecasts range from 70-100% of average for most Idaho streams. River runners can expect below normal volumes in northern Idaho, but overall whitewater boating opportunities should be excellent across the state. High peak flows are still possible; spring temperatures and precipitation will determine when the snow starts melting and magnitude of streamflow peaks. When compared to last year, river runners can expect a much shorter high water season with lower volumes and will be able to put on the river earlier.

IDAHO SURFACE WATER SUPPLY INDEX (SWSI)
As of March 1, 1998

The Surface Water Supply Index (SWSI) is predictive indicator of surface water availability within a watershed for the spring and summer water use season. The index is calculated by combining pre-runoff reservoir storage (carryover) with forecasts of spring and summer streamflow. SWSI values are scaled from +4.1 (abundant supply) to -4.1 (extremely dry), with a value of zero indicating a median water supply as compared to historical occurrences.

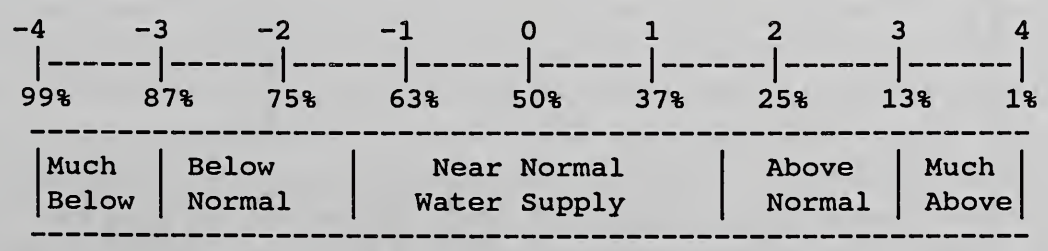
SWSI values are published January through May, and provide a more comprehensive outlook of water availability than either streamflow forecasts or reservoir storage figures alone. The SWSI index allows comparison of water availability between basins for drought or flood severity analysis. Threshold SWSI values have been established for most basins to indicate the potential for agricultural water shortages.

The following agencies and cooperators provide assistance to the Natural Resources Conservation Service in the preparation of the Surface Water Supply Index for Idaho:

US Department of Commerce, National Weather Service
US Bureau of Reclamation
Idaho Water Users Association
US Army Corps of Engineers
Idaho Department of Water Recourses
PacifiCorp

BASIN or REGION	*SWSI Value*	*Recent Years With Similar SWSI Value*	*Agricultural Water Supply Shortage May Occur When SWSI is Less Than*
PANHANDLE	-2.6	1980, 88	NA
CLEARWATER	-0.4	1991	NA
SALMON	-0.4	1981	NA
WEISER	-0.1	1986	NA
PAYETTE	0.1	1969	NA
BOISE	0.0	1964	-2.6
BIG WOOD	-0.2	1993	-1.4
LITTLE WOOD	0.3	1985, 70	-2.1
BIG LOST	-0.8	1985, 93	-0.8
LITTLE LOST	-0.5	1990, 81	0.0
HENRYS FORK	1.0	1978	-3.3
SNAKE (AMERICAN FALLS)	1.4	1980	-2.0
OAKLEY	2.0	1985	0.0
SALMON FALLS	2.0	1982, 80	0.0
BRUNEAU	-1.3	1985, 73	NA
OWYHEE	0.0	1995	NA
BEAR RIVER	-0.6	1987	-3.8

SWSI SCALE, PERCENT CHANCE OF EXCEEDANCE, AND INTERPRETATION



Note: The Percent Chance of Exceedance is an indicator of how often a range of SWSI values might be expected to occur. Each SWSI unit represents about 12% of the historical occurrences. As an example of interpreting the above scale, the SWSI can be expected to be greater than -3.0, 87% of the time and less than -3.0, 13% of the time. Half the time, the SWSI will be below and half the time above a value of zero. The interval between -1.5 and +1.5 described as "Near Normal Water Supply", represents three SWSI units and would be expected to occur about one third (36%) of the time.

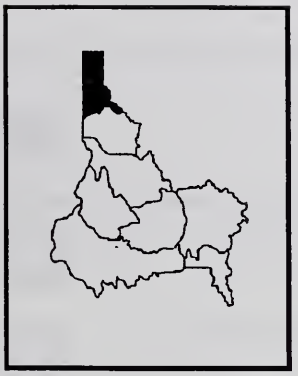
BASIN-WIDE SNOWPACK SUMMARY

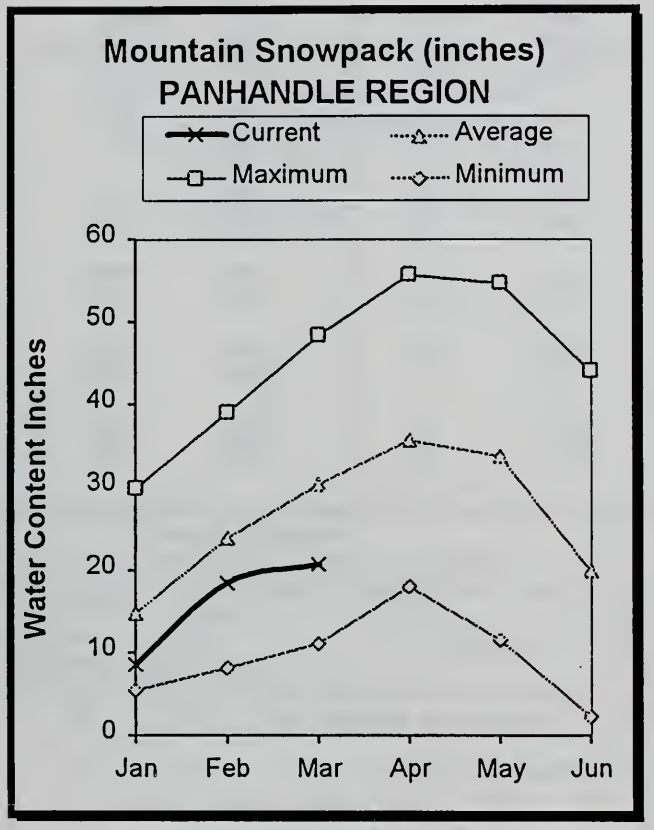
MARCH 1998

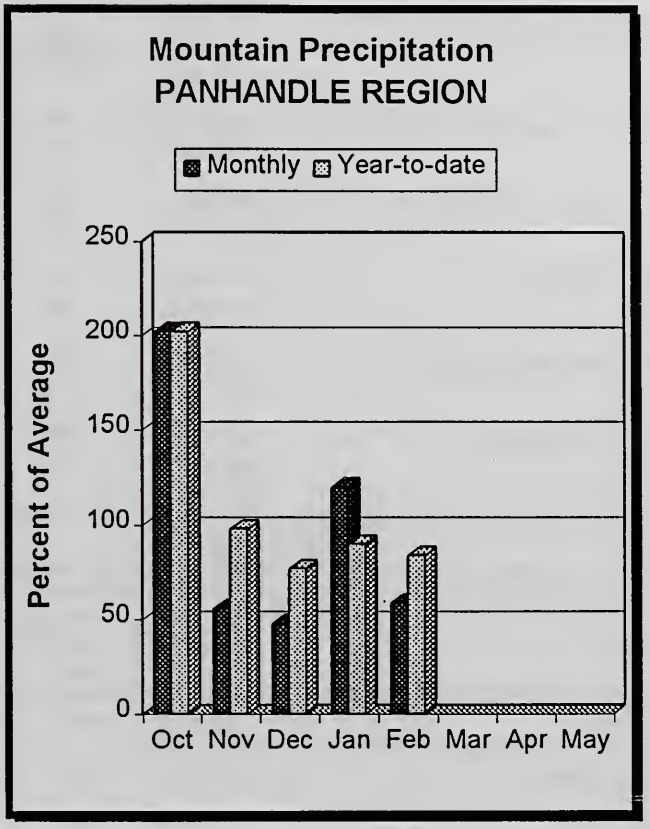
BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
PANHANDLE REGION		
Kootenai ab Bonners Ferry	55%	74%
Moyie River	61%	77%
Priest River	54%	82%
Pend Oreille River	49%	74%
Rathdrum Creek	62%	104%
Hayden Lake	51%	96%
Coeur d'Alene River	51%	79%
St. Joe River	46%	73%
Spokane River	52%	81%
Palouse River	50%	76%
CLEARWATER RIVER BASIN		
North Fork Clearwater	48%	71%
Lochsa River	52%	71%
Selway River	55%	78%
Clearwater Basin Total	50%	73%
SALMON RIVER BASIN		
Salmon River ab Salmon	54%	86%
Lemhi River	62%	88%
Middle Fork Salmon River	57%	81%
South Fork Salmon River	63%	87%
Little Salmon River	72%	93%
Salmon Basin Total	59%	87%
WEISER, PAYETTE, BOISE RIVER BASINS		
Mann Creek	117%	120%
Weiser River	94%	107%
North Fork Payette	70%	98%
South Fork Payette	63%	88%
Payette Basin Total	68%	95%
Middle & North Fork Boise	57%	91%
South Fork Boise River	64%	98%
Mores Creek	69%	107%
Boise Basin Total	66%	99%
Canyon Creek	110%	129%

BASIN	PERCENT OF LAST YEAR	PERCENT OF AVERAGE
WOOD AND LOST RIVER BASINS		
Big Wood ab Magic	53%	89%
Camas Creek	83%	112%
Big Wood Basin Total	60%	96%
Little Wood River	68%	97%
Fish Creek	71%	92%
Big Lost River	54%	88%
Little Lost River	57%	87%
UPPER SNAKE RIVER BASIN		
Birch-Medicine Lodge Creeks	67%	97%
Camas-Beaver Creeks	78%	92%
Henrys Fork-Falls River	55%	88%
Teton River	60%	96%
Snake above Jackson Lake	58%	92%
Gros Ventre River	66%	97%
Hoback River	57%	84%
Greys River	60%	88%
Salt River	69%	98%
Snake above Palisades	60%	93%
Willow Creek	65%	114%
Blackfoot River	67%	98%
Portneuf River	78%	122%
Snake abv American Falls Resv	63%	98%
SOUTHSIDE SNAKE RIVER BASINS		
Raft River	84%	136%
Goose-Trapper Creeks	71%	117%
Salmon Falls Creek	66%	97%
Bruneau River	71%	103%
Owyhee Basin Total	86%	121%
BEAR RIVER BASIN		
Smiths & Thomas Forks	62%	94%
Bear River ab WY-ID line	63%	94%
Montpelier Creek	65%	92%
Mink Creek	76%	116%
Cub River	68%	124%
Bear River ab ID-UT line	67%	104%
Malad River	74%	128%

PANHANDLE REGION
MARCH 1, 1998







WATER SUPPLY OUTLOOK

February precipitation was below normal for the fourth consecutive month at 59% of average. Precipitation for the water year is also below normal at 84% of average which is typical during El Nino years. As a result of the below normal precipitation last month, snowpack percentages also decreased and are currently about three-quarters of average in the St. Joe, Pend Oreille and Kootenai river basins. The Panhandle Region and Clearwater River basin have the lowest snowpacks in the state. Storage in Coeur d'Alene, Priest and Pend Oreille lakes is 45-55% of their normal summer levels which is common for this time of year. Streamflow forecasts decreased slightly from last month and call for below normal runoff which is typical during El Nino years. Streamflow projections range from 70-80% of average for these northern Idaho streams. Water users can expect below normal runoff volumes this summer and an earlier return to baseflow conditions then last year.

PANHANDLE REGION
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
KOOTENAI at Leonia (1,2)	APR-JUN	3185	4014	4390	77	4766	5595	5701
	APR-JUL	4092	5122	5590	78	6058	7088	7199
	APR-SEP	4696	5882	6420	78	6958	8144	8275
CLARK FK at Whitehorse Rpds (1,2)	APR-JUN	4491	6172	6935	69	7698	9379	10050
	APR-JUL	5385	7355	8250	70	9145	11115	11730
	APR-SEP	5927	8095	9080	70	10065	12233	12910
PEND OREILLE Lake Inflow (1,2)	APR-JUN	5188	7184	8090	71	8996	10992	11390
	APR-JUL	6265	8380	9340	71	10300	12415	13150
	APR-SEP	6837	9150	10200	71	11250	13563	14370
PRIEST nr Priest River (1,2)	APR-JUL	413	562	630	77	698	847	814
	APR-SEP	439	598	670	77	742	901	868
COEUR D'ALENE at Enaville	APR-JUL	436	543	615	80	687	794	770
	APR-SEP	462	571	645	80	719	828	809
ST.JOE at Calder	APR-JUL	611	735	820	70	905	1029	1169
	APR-SEP	654	783	870	70	957	1086	1237
SPOKANE near Post Falls (2)	APR-JUL	1258	1604	1840	70	2076	2422	2633
	APR-SEP	1317	1670	1910	70	2150	2503	2730
SPOKANE at Long Lake	APR-JUL	1490	1859	2110	72	2361	2730	2936
	APR-SEP	1647	2030	2290	73	2550	2933	3159

PANHANDLE REGION
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HUNGRY HORSE	3451.0	2358.0	1681.0	2205.0
FLATHEAD LAKE	1791.0	587.7	935.1	881.0
NOXON RAPIDS	335.0	326.7	291.1	298.1
PEND OREILLE	1561.3	901.8	961.5	831.8
COEUR D'ALENE	238.5	103.5	146.5	149.1
PRIEST LAKE	119.3	50.0	62.0	54.1

PANHANDLE REGION
Watershed Snowpack Analysis - March 1, 1998

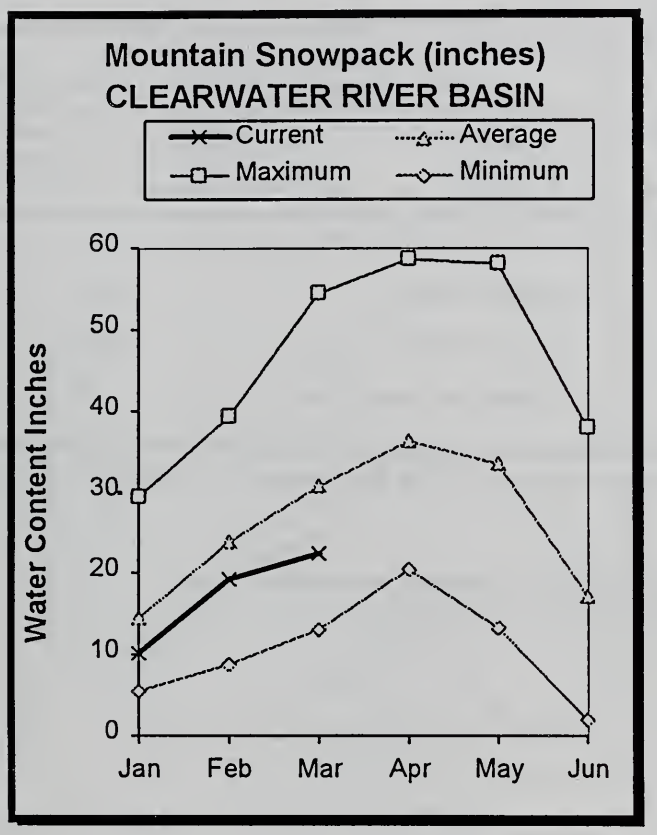
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Kootenai ab Bonners Ferry	32	55	74
Moyie River	3	48	61
Priest River	4	54	82
Pend Oreille River	98	49	73
Rathdrum Creek	4	60	104
Hayden Lake	2	51	96
Coeur d'Alene River	9	51	79
St. Joe River	3	46	73
Spokane River	17	51	81
Palouse River	2	50	76

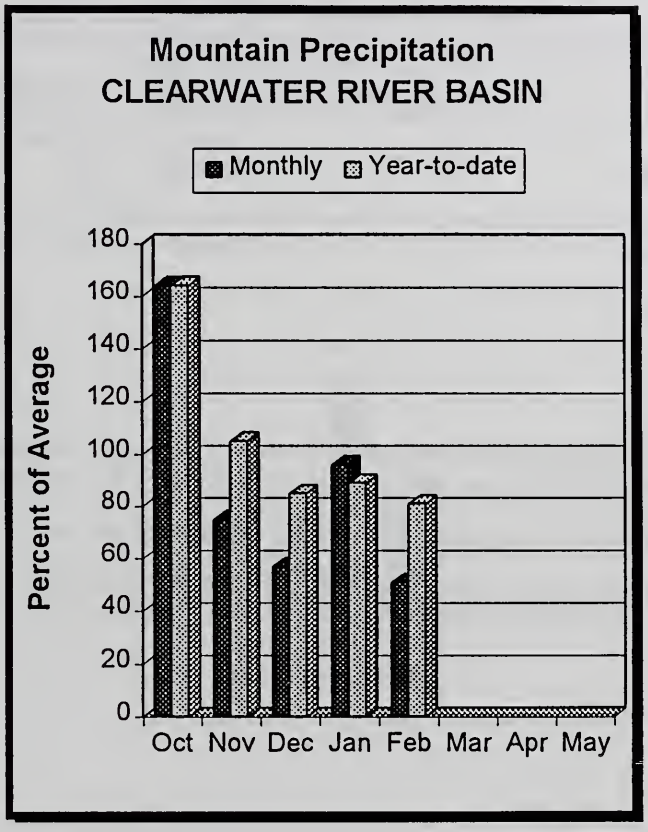
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

CLEARWATER RIVER BASIN
MARCH 1, 1998





WATER SUPPLY OUTLOOK

Only half the normal amount of precipitation fell in February, decreasing the snowpack percentages slightly to about three-quarters of average. The lowest snowpacks in the state are in the Panhandle Region and Clearwater River basin. Snowpacks in the Clearwater River basin range from 71% of average in the North Fork Clearwater River basin to 78% in the Selway River basin. Overall, the snowpack in the Clearwater River basin is 73% of average which is about the same as in 1995 and 1992. Dworshak Reservoir is 110% of average (66% of capacity) and should fill depending upon timing of inflow and releases from the reservoir. Streamflow forecasts decreased slightly from last month and call for 74% of average for Dworshak Reservoir inflow. The Clearwater River at Spalding is forecast at 80% of average for the April-July period. Runoff volumes will be below normal, but supplies should be adequate for water users and recreational opportunities this summer. Potential for peak flows in the 20,000 cfs range are possible on the Selway River, but the duration of the high water season will be much shorter than last year.

CLEARWATER RIVER BASIN
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
DWORSHAK RESV INFLOW (1,2)	APR-JUL	1397	1812	2000	74	2188	2603	2692
	APR-SEP	1495	1932	2130	74	2328	2765	2866
CLEARWATER at Orofino (1)	APR-JUL	2342	3413	3900	83	4387	5458	4718
	APR-SEP	2466	3596	4110	83	4624	5754	4976
CLEARWATER at Spalding (1,2)	APR-JUL	3717	5370	6120	80	6870	8523	7618
	APR-SEP	3926	5676	6470	80	7264	9014	8052

CLEARWATER RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
DWORSHAK	3468.0	2291.5	1868.7	2084.1

CLEARWATER RIVER BASIN
Watershed Snowpack Analysis - March 1, 1998

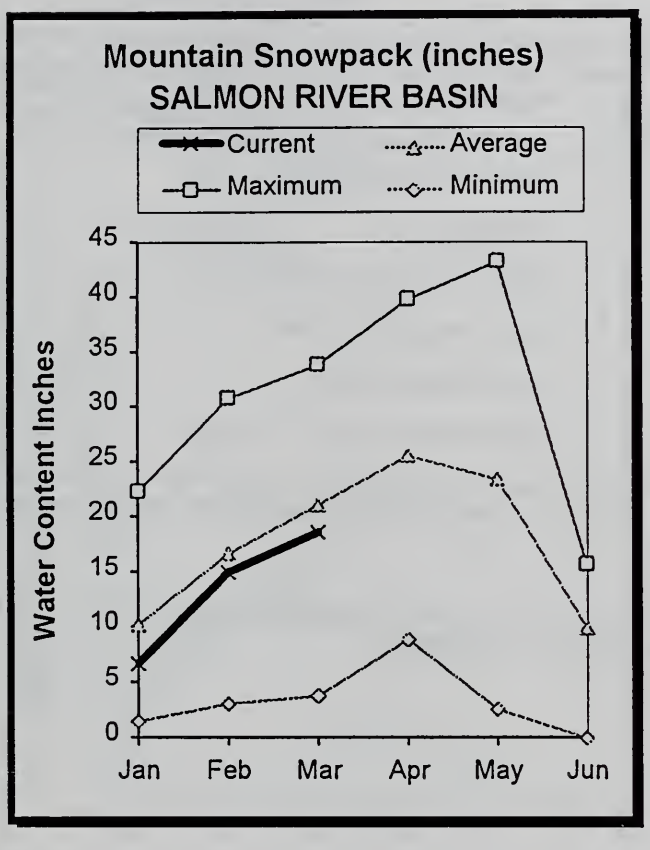
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
North Fork Clearwater	10	48	71
Lochsa River	4	52	73
Selway River	6	55	78
Clearwater Basin Total	19	50	74

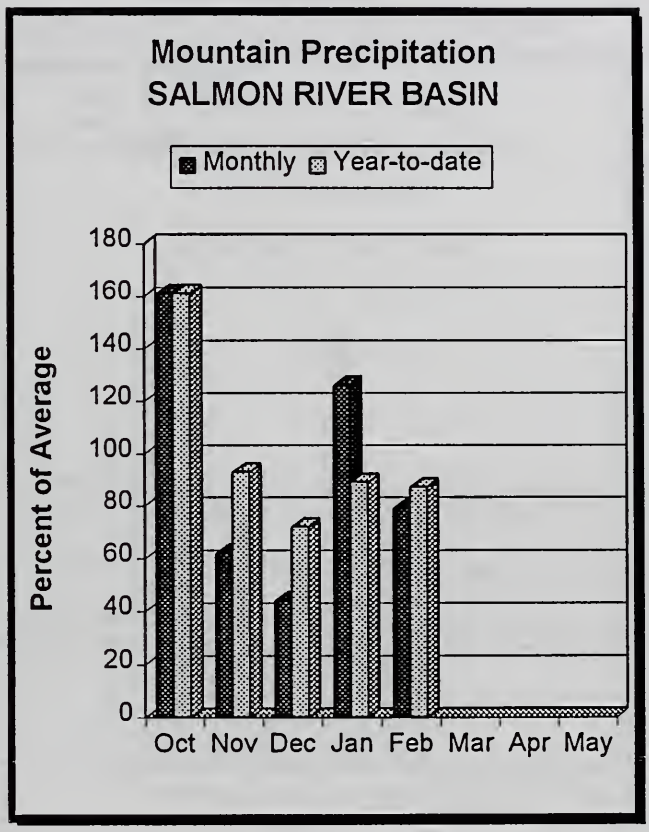
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

SALMON RIVER BASIN
MARCH 1, 1998





WATER SUPPLY OUTLOOK

February precipitation was below normal at 79% of average. Precipitation for the water year is 87% for the water year. Snowpack percentages decreased slightly from last month and are currently 87% of average for the Salmon River basin as a whole. Salmon River tributaries range from 81% of average for the Middle Fork to 93% for the Little Salmon River basin. Streamflow projections call for 87% of average for the Salmon River at Salmon and 93% for Salmon River at White Bird. River runners and water users can expect much lower volumes than last year. High peak flows are still possible when the snow starts melting. The magnitude of peak flows depends upon spring temperatures and precipitation, but the duration of high water will be much shorter than last year.

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SALMON RIVER BASIN
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
SALMON at Salmon (1)	APR-JUL	414	648	755	87	862	1096	869
	APR-SEP	490	765	890	87	1015	1290	1019
SALMON at White Bird (1)	APR-JUL	3800	5010	5560	93	6110	7320	5956
	APR-SEP	4210	5551	6160	93	6769	8110	6602

SALMON RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg

SALMON RIVER BASIN
Watershed Snowpack Analysis - March 1, 1998

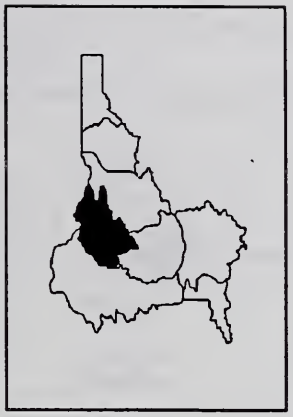
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Salmon River ab Salmon	9	53	86
Lemhi River	8	61	88
Middle Fork Salmon River	3	57	81
South Fork Salmon River	3	63	87
Little Salmon River	4	72	93
Salmon Basin Total	28	59	87

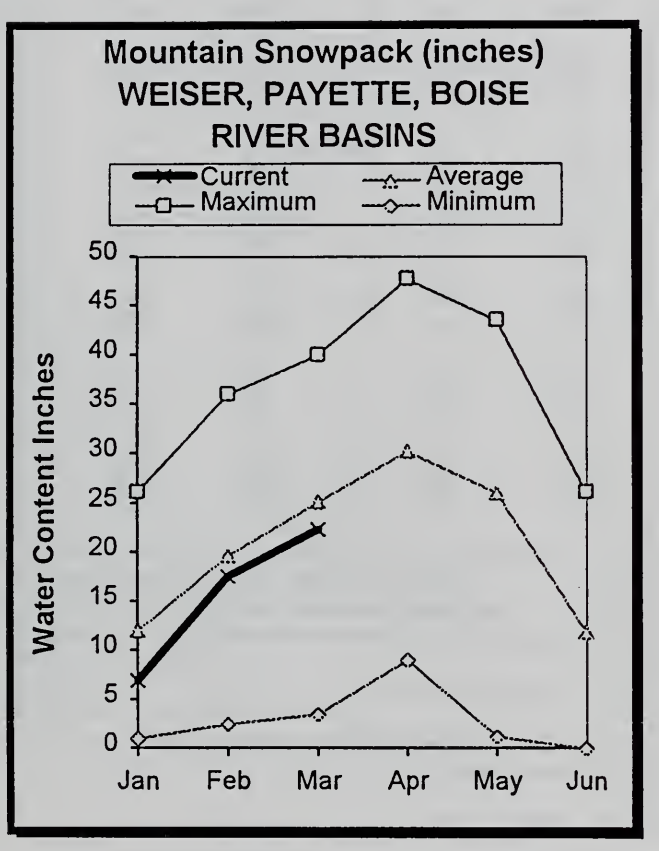
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

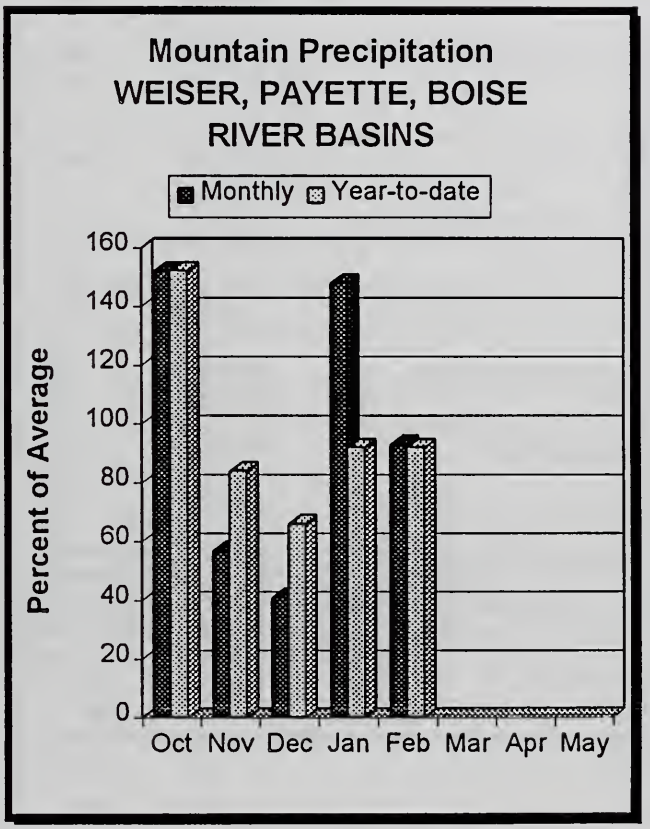
The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

WEISER, PAYETTE, BOISE RIVER BASINS
MARCH 1, 1998







WATER SUPPLY OUTLOOK

February precipitation was 93% of average and is 92% for the water year. Snowpacks are about the same as last month and range from 95-105% of average in the Boise, Payette, and Weiser basins. Reservoir storage remains well above average for this time of year. The Boise system is 72% of capacity while the Payette system is 81% of capacity. Releases from Lucky Peak Reservoir increased to 1,800 cfs in February and will gradually increase in March to maintain enough storage space for this season's runoff. Streamflow forecasts are about the same as last month and call for 90-100% of average runoff for these west-central Idaho streams. Water users can expect an adequate water supply this year. Reservoirs will fill and the duration of high flows for regulated and unregulated streams will be much less than last year. Spring temperatures and precipitation will determine when the snow starts melting and timing and magnitude of streamflow peaks.

WEISER, PAYETTE, BOISE RIVER BASINS
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
WEISER nr Weiser (1)	APR-JUL	173	319	385	100	451	597	386
	APR-SEP	188	344	415	100	486	642	415
SF PAYETTE at Lowman	APR-JUL	313	358	389	90	420	465	432
	APR-SEP	355	406	441	90	476	527	488
DEADWOOD RESERVOIR Inflow (1,2)	APR-JUL	98	118	128	95	138	158	135
	APR-SEP	102	124	134	94	144	166	143
NF PAYETTE nr Cascade (1,2)	APR-JUL	360	458	503	101	548	646	496
	APR-SEP	386	492	540	101	588	694	533
NF PAYETTE nr Banks (2)	APR-JUL	500	593	656	101	719	812	648
	APR-SEP	531	630	698	101	766	865	690
PAYETTE nr Horseshoe Bend (1,2)	APR-JUL	1149	1429	1556	96	1683	1963	1618
	APR-SEP	1266	1571	1710	97	1849	2154	1755
BOISE near Twin Springs (1)	APR-JUL	434	534	580	92	626	726	631
	APR-SEP	461	570	620	90	670	779	686
SF BOISE at Anderson Rnch Dm (1,2)	APR-JUL	331	434	480	88	526	629	544
	APR-SEP	342	451	500	86	549	658	582
MORES CK nr Arrowrock Dam	APR-JUL	95	118	133	103	148	171	129
	APR-SEP	98	121	137	102	153	176	134
BOISE nr Boise (1,2)	APR-JUN	864	1035	1113	88	1191	1362	1264
	APR-JUL	904	1156	1270	89	1384	1636	1421
	APR-SEP	963	1229	1350	88	1471	1737	1535

WEISER, PAYETTE, BOISE RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MANN CREEK	11.1	5.1	8.5	6.8
CASCADE	703.2	567.3	397.1	393.8
DEADWOOD	161.9	130.5	91.4	84.5
ANDERSON RANCH	464.2	373.7	259.7	282.1
ARROWROCK	286.6	224.0	95.8	234.8
LUCKY PEAK	293.2	159.1	156.4	122.5
LAKE LOWELL (DEER FLAT)	177.1	114.1	104.3	140.6

WEISER, PAYETTE, BOISE RIVER BASINS
Watershed Snowpack Analysis - March 1, 1998

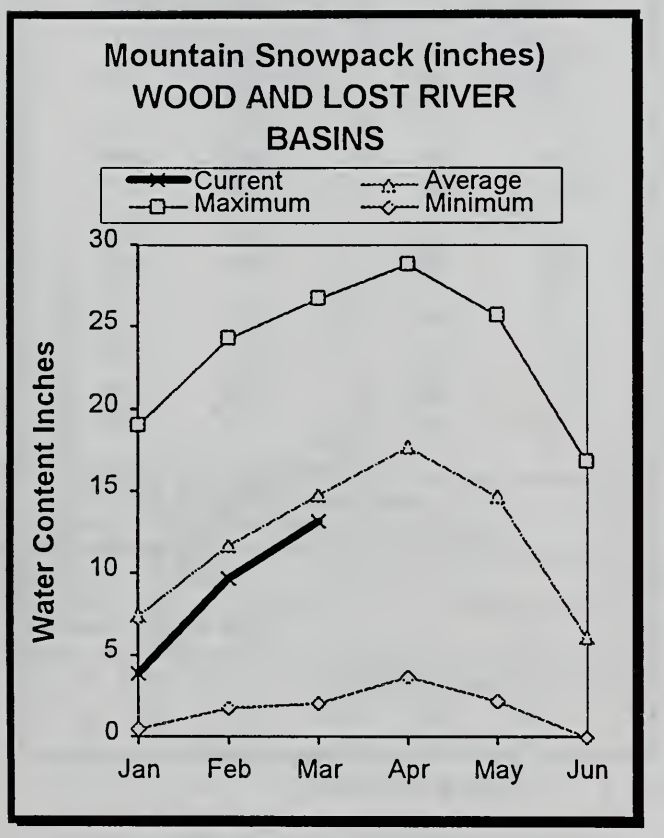
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Mann Creek	2	117	120
Weiser River	5	94	107
North Fork Payette	8	70	98
South Fork Payette	5	63	88
Payette Basin Total	14	68	95
Middle & North Fork Boise	6	57	91
South Fork Boise River	9	64	98
Mores Creek	4	69	107
Boise Basin Total	15	66	99
Canyon Creek	2	110	129

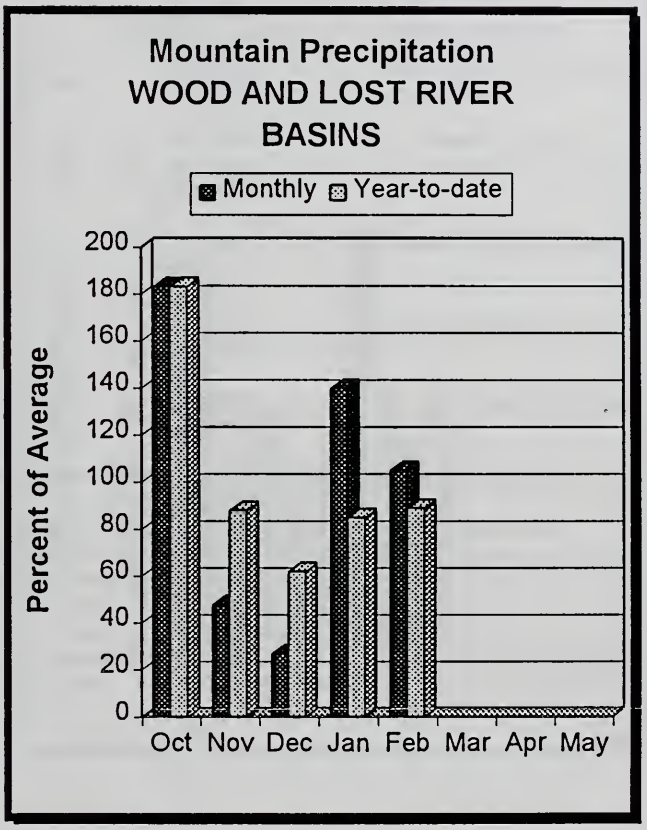
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

WOOD and LOST RIVER BASINS
MARCH 1, 1998





WATER SUPPLY OUTLOOK

February precipitation was near normal and helped maintain or slightly increase snowpacks in these central mountain basins. Precipitation for the water year is 89% of average. Snowpack percentages are about 96% of average in the Big Wood and Little Wood basins and 88% in the Big Lost and Little Lost basins. Little Wood Reservoir is 66% full; Mackay Reservoir is 78% full; and Magic Reservoir is 85% full. Streamflow forecasts range from 70-90% of average for these basins. Magic Reservoir inflow is forecast at 71% of average; Little Wood River is forecast at 90%. The Big and Little Lost rivers are forecast at 85-95% of average. Water supplies should be adequate for most users in these basins.

WOOD AND LOST RIVER BASINS
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BIG WOOD at Hailey (1)	APR-JUL	130	177	200	78	225	285	255
	APR-SEP	149	199	225	78	252	317	289
BIG WOOD near Bellevue	APR-JUL	69	97	119	65	143	182	183
	APR-SEP	75	104	126	64	151	191	197
CAMAS CREEK near Blaine	APR-JUL	52	69	83	81	98	122	102
	APR-SEP	53	70	84	82	99	123	103
BIG WOOD below Magic Dam (2)	APR-JUL	127	176	210	71	244	293	295
	APR-SEP	128	181	217	70	253	306	310
LITTLE WOOD near Carey (2)	MAR-JUL	56	76	90	90	104	124	100
	MAR-SEP	60	82	96	89	110	132	108
BIG LOST at Howell Ranch	APR-JUN	87	109	124	88	139	161	141
	APR-JUL	104	137	160	88	183	216	181
	APR-SEP	121	159	184	89	209	247	206
BIG LOST below Mackay Reservoir (2)	APR-JUL	79	110	132	86	154	185	153
	APR-SEP	97	133	157	85	181	217	184
LITTLE LOST blw Wet Creek	APR-JUL	20	25	28	90	31	36	31
	APR-SEP	25	31	35	90	39	45	39
LITTLE LOST nr Howe	APR-JUL	25	29	31	94	33	37	33
	APR-SEP	32	37	40	93	43	48	43

WOOD AND LOST RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
MAGIC	191.5	162.7	78.0	102.4
LITTLE WOOD	30.0	19.7	5.3	17.6
MACKAY	44.4	34.7	16.9	32.6

WOOD AND LOST RIVER BASINS
Watershed Snowpack Analysis - March 1, 1998

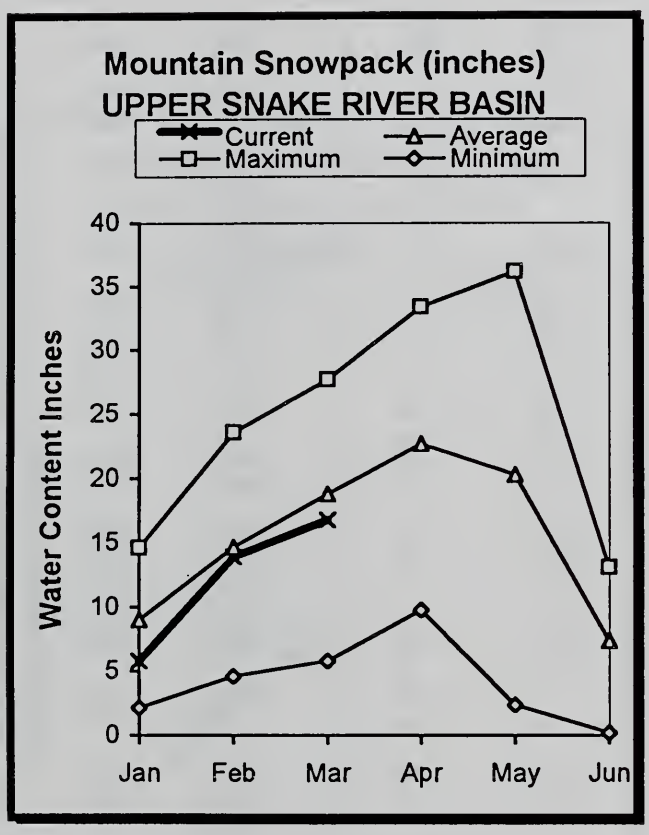
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Big Wood ab Magic	8	53	89
Camas Creek	5	83	112
Big Wood Basin Total	13	60	96
Little Wood River	3	68	97
Fish Creek	3	71	92
Big Lost River	6	54	88
Little Lost River	4	57	87

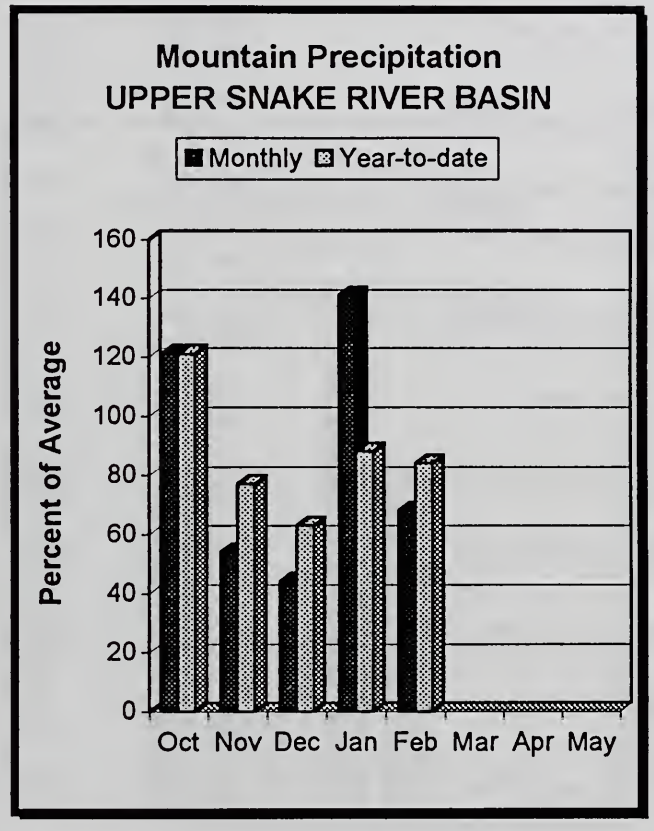
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

UPPER SNAKE RIVER BASIN
MARCH 1, 1998





WATER SUPPLY OUTLOOK

February precipitation was below normal at 68% of average. Precipitation for the water year is 84% of average. As a result of the below normal precipitation, most snowpack percentages decreased slightly and currently range from 85-95% of average. The exceptions are the lower elevation drainages in the Portneuf River and Willow Creek area which increased to 122% and 114% of average, respectively. This year's snow water equivalent is about two-thirds of last year's record snowpack. Combined reservoir storage in the 8 major upper Snake reservoirs is 115% of average, 83% of capacity. Streamflow forecasts call for near normal runoff and range from 90-105% of average for the streams in this area. Water supplies will be adequate to meet the numerous and diverse agricultural and recreational water needs.

UPPER SNAKE RIVER BASIN
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
HENRYS FORK near Ashton (2)	APR-JUL	461	511	545	100	579	629	544
	APR-SEP	607	665	705	97	745	803	730
HENRYS FORK near Rexburg (2)	APR-JUL	915	1076	1185	97	1294	1455	1228
	APR-SEP	1196	1377	1500	97	1623	1804	1551
FALLS near Squirrel (1,2)	APR-JUL	253	307	331	91	355	409	364
	APR-SEP	310	366	391	91	416	472	432
TETON near Driggs	APR-JUL	121	146	164	108	182	207	152
	APR-SEP	161	192	213	107	234	265	199
TETON near St. Anthony	APR-JUL	289	346	385	102	424	481	377
	APR-SEP	348	413	457	100	501	566	457
SNAKE near Moran (1,2)	APR-SEP	606	729	785	90	841	964	869
SNAKE above Palisades (2)	APR-JUL	1861	2050	2179	94	2308	2497	2311
	APR-SEP	2181	2396	2542	95	2688	2903	2671
GREYS above Palisades	APR-JUL	229	268	295	89	322	361	333
	APR-SEP	271	315	345	89	375	419	388
SALT near Etna	APR-JUL	204	258	295	93	332	386	319
	APR-SEP	276	340	383	96	426	490	399
PALISADES RESERVOIR INFLOW (1,2)	APR-JUL	2328	2769	2970	92	3171	3612	3226
	APR-SEP	2737	3227	3450	92	3673	4163	3763
SNAKE near Heise (2)	APR-JUL	2594	2919	3140	91	3361	3686	3451
	APR-SEP	3064	3431	3680	91	3929	4296	4049
SNAKE nr Blackfoot (1,2)	APR-JUL	3052	3855	4220	95	4585	5388	4444
	APR-SEP	3927	4803	5200	95	5597	6473	5482
PORTNEUF at Topaz	MAR-JUL	76	86	93	108	100	110	86
	MAR-SEP	92	104	112	105	120	132	107
AMERICAN FALLS RESV INFLOW (1,2)	APR-JUL	1492	2364	2760	90	3156	4028	3066
	APR-SEP	1517	2516	2970	90	3424	4423	3303

UPPER SNAKE RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
HENRYS LAKE	90.4	87.8	84.2	79.4
ISLAND PARK	135.2	112.5	112.4	110.1
GRASSY LAKE	15.2	7.8	13.2	11.0
JACKSON LAKE	847.0	649.6	652.3	481.0
PALISADES	1400.0	1204.5	854.7	1063.1
RIRIE	80.5	45.2	52.0	41.7
BLACKFOOT	348.7	281.6	293.7	242.1
AMERICAN FALLS	1672.6	1401.8	1268.0	1277.2

UPPER SNAKE RIVER BASIN
Watershed Snowpack Analysis - March 1, 1998

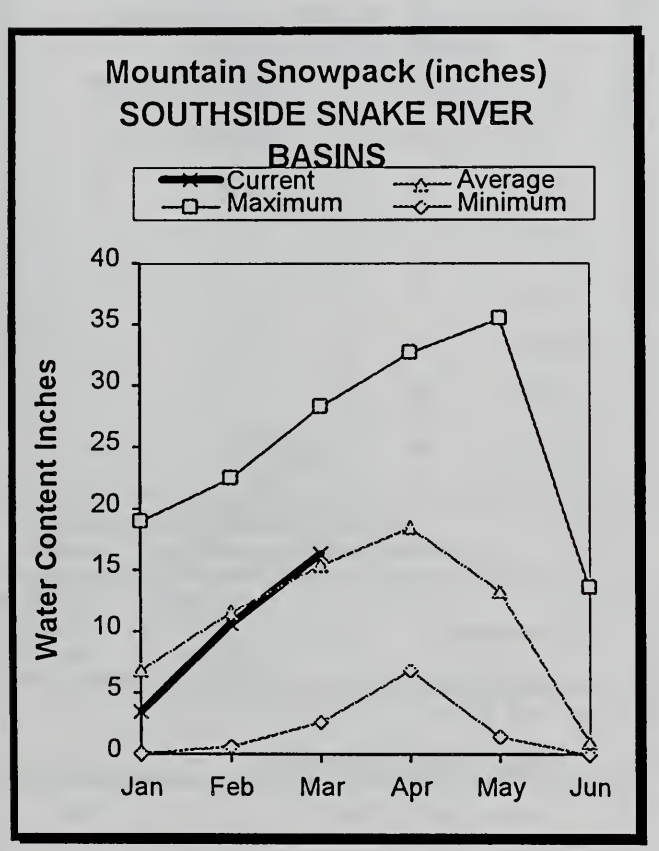
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Camas-Beaver Creeks	4	78	92
Henrys Fork River	12	55	88
Teton River	8	60	96
Snake above Jackson Lake	12	58	92
Gros Ventre River	3	66	97
Hoback River	6	55	82
Greys River	4	60	88
Salt River	5	69	98
Snake above Palisades	30	60	93
Willow Creek	7	65	114
Blackfoot River	5	67	98
Portneuf River	6	78	122
Snake abv American Falls	45	63	98

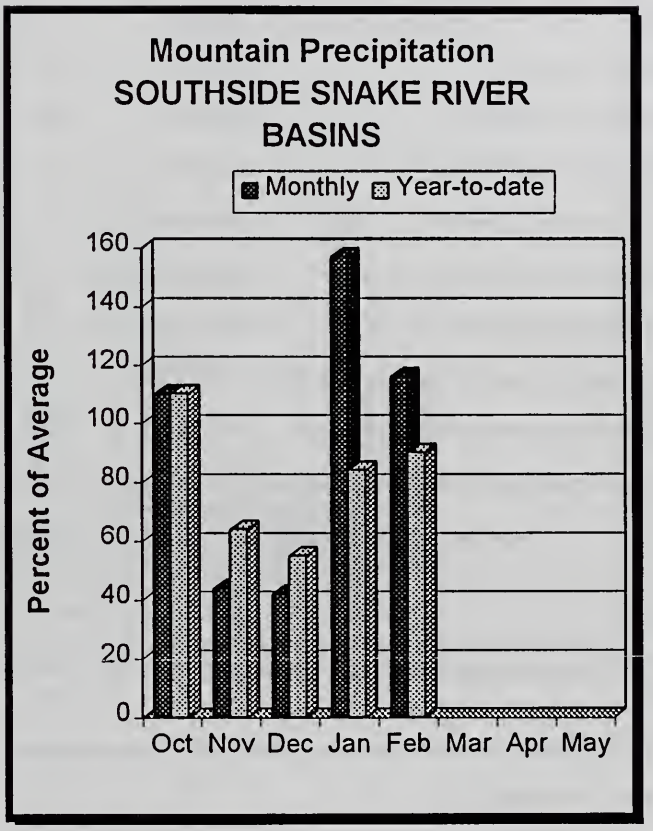
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

SOUTHSIDE SNAKE RIVER BASINS MARCH 1, 1998





WATER SUPPLY OUTLOOK

The El Nino storm track from California brought above normal precipitation last month in these southwest Idaho basins. February precipitation was 116% of average and is 90% for the water year. February precipitation was isolated and highly variable. The Howell Canyon SNOTEL site near the Pomerelle Ski area received 8.6 inches, almost twice the normal February amount and the greatest of any station in Idaho. Snowpacks are 136% of average in the Raft River; 121% in the Owyhee and 117% in the Oakley basin. Streamflow forecasts increased from last month and call for runoff in the 75-95% of average range. Reservoir storage is well above average in Oakley, Salmon Falls and Wildhorse reservoirs and near normal in Owyhee Reservoir. Owyhee and Wildhorse reservoirs are projected to fill. Oakley and Salmon Falls reservoirs are not expected to fill unless runoff volumes exceed the 10 Percent Chance of Exceedance forecast. The above average snowpacks in these high desert streams and good reservoir carry over storage will provide an adequate water supply and a good whitewater season.

SOUTHSIDE SNAKE RIVER BASINS
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
OAKLEY RESV INFLOW	MAR-JUL	20	26	30	91	35	42	33
	MAR-SEP	22	28	32	89	37	45	36
SALMON FALLS CREEK nr San Jacinto	MAR-JUN	40	54	64	74	76	95	86
	MAR-JUL	42	56	68	74	80	100	92
	MAR-SEP	44	59	71	74	84	104	96
BRUNEAU near Hot Springs	MAR-JUL	111	149	177	75	208	258	235
	MAR-SEP	120	159	189	77	221	273	246
OWYHEE near Gold Creek (2)	MAR-JUL	15.0	21	26	83	31	40	31
OWYHEE nr Owyhee (2)	APR-JUL	29	54	70	81	87	111	86
OWYHEE near Rome	MAR-JUL	371	459	525	96	595	706	545
OWYHEE RESV INFLOW (2)	MAR-SEP	403	492	557	94	626	736	595
SUCCOR CK nr Jordan Valley	MAR-JUL	4.1	9.9	13.9	97	17.9	24	14.3
SNAKE RIVER at King Hill (1,2)	APR-JUL			2560	88			2896
SNAKE RIVER near Murphy (1,2)	APR-JUL			2650	89			2980
SNAKE RIVER at Weiser (1,2)	APR-JUL			4970	91			5465
SNAKE RIVER at Hells Canyon Dam (1,2	APR-JUL			5470	89			6129
SNAKE blw Lower Granite Dam (1,2)	APR-JUL	11830	16829	19100	88	21371	26370	21650

SOUTHSIDE SNAKE RIVER BASINS
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
OAKLEY	77.4	43.6	33.1	29.9
SALMON FALLS	182.6	76.1	59.5	53.9
WILDHORSE RESERVOIR	71.5	55.5	57.0	33.0
OWYHEE	715.0	497.7	550.5	512.0
BROWNLEE	1419.3	1081.3	1021.5	975.0

SOUTHSIDE SNAKE RIVER BASINS
Watershed Snowpack Analysis - March 1, 1998

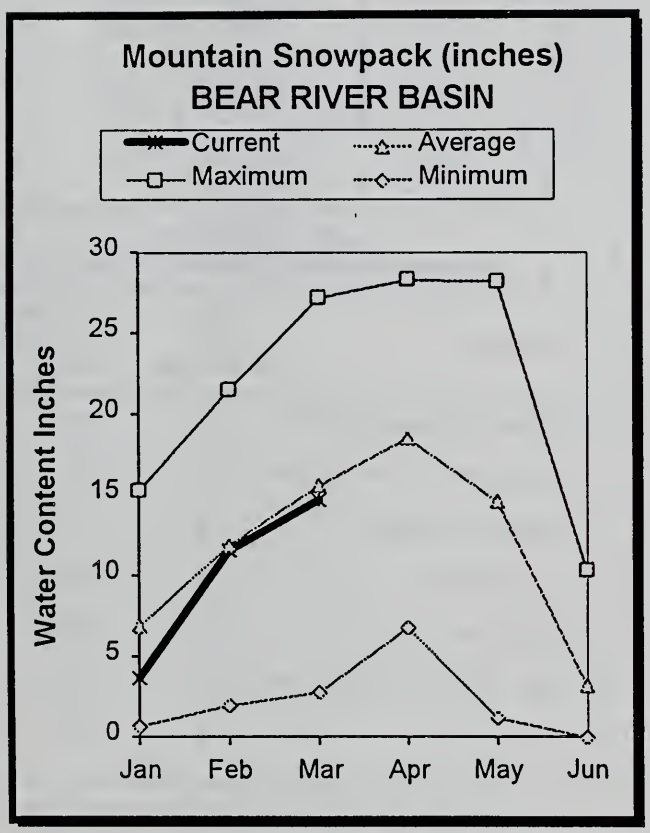
Watershed	Number of Data Sites	This Year as % of Last Yr	Average
Raft River	4	84	136
Goose-Trapper Creeks	4	71	117
Salmon Falls Creek	6	65	94
Bruneau River	8	71	103
Owyhee Basin Total	20	86	121

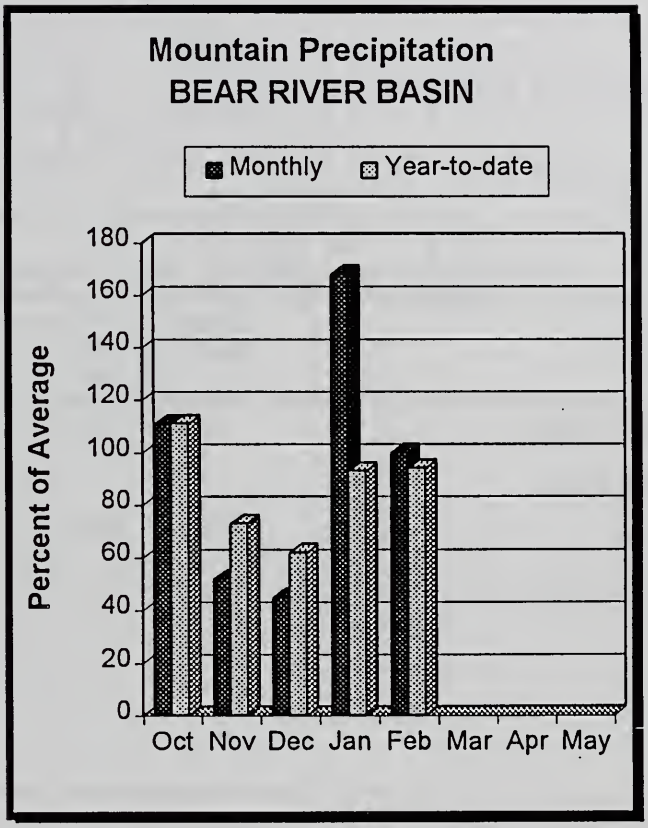
* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

BEAR RIVER BASIN
MARCH 1, 1998





WATER SUPPLY OUTLOOK

February precipitation was normal in the Bear River basin and is 94% of average for the water year. Snowpack levels vary and are highest in the northern part of the Bear River basin in Idaho. Snowpacks range from 126% of average in the Malad and Cub river basins to 94% in the headwaters of the Bear River basin in Utah. Overall, the Bear River snowpack is 104% of average. The snowpack is 60-70% of last year's snowpack at this time. Bear Lake is 78% of capacity which is 112% of average for this time of year. Montpelier Creek Reservoir is 68% full and passing inflow. Streamflow forecasts call for 78% of average for the Bear River below Stewart Dam, 82% for Montpelier Creek, and 106% for Cub River. Water supplies will be adequate for the water users in these basins.

BEAR RIVER BASIN
Streamflow Forecasts - March 1, 1998

Forecast Point	Forecast Period	<<====== Drier ====== Future Conditions ======= Wetter =====>> Chance Of Exceeding * 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	50% (Most Probable) (% AVG.)	30% (1000AF)	10% (1000AF)	30-Yr Avg. (1000AF)
BEAR R nr Randolph, UT	APR-JUL	31	72	100	85	128	169	118
	APR-SEP	30	77	108	85	139	186	127
SMITHS FK nr Border, WY	APR-JUL	64	79	91	89	105	130	102
	APR-SEP	75	92	105	89	120	147	118
THOMAS FK nr WY-ID State Line	APR-JUL	15.5	22	27	82	34	47	33
	APR-SEP	17.0	23	29	81	36	50	36
BEAR R blw Stewart Dam nr Montpelier	APR-JUL	121	183	225	78	267	329	288
	APR-SEP	138	208	255	78	302	372	327
MONTPELIER CK nr Montpelier (2)	APR-JUL	6.7	8.5	10.0	82	11.7	14.9	12.2
	APR-SEP	8.0	9.9	11.5	81	13.3	16.6	14.2
CUB R nr Preston	APR-JUL	39	46	50	106	55	61	47

BEAR RIVER BASIN
Reservoir Storage (1000 AF) - End of February

Reservoir	Usable Capacity	*** Usable Storage *** This Year	Last Year	Avg
WOODRUFF NARROWS	57.3	46.0	30.2	---
WOODRUFF CREEK	4.0	4.0	2.1	---
BEAR LAKE	1421.0	1109.9	943.2	992.5
MONTPELIER CREEK	4.0	2.7	2.0	1.6

BEAR RIVER BASIN
Watershed Snowpack Analysis - March 1, 1998

Watershed	Number of Data Sites	This Year as % of Last Yr	This Year as % of Average
Smiths & Thomas Forks	3	62	94
Bear River ab WY-ID line	10	62	94
Montpelier Creek	2	65	92
Mink Creek	4	76	116
Cub River	3	68	124
Bear River ab ID-UT line	22	67	104
Malad River	3	74	128

* 90%, 70%, 30%, and 10% chances of exceeding are the probabilities that the actual flow will exceed the volumes in the table.

The average is computed for the 1961-1990 base period.

(1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
(2) - The value is natural flow - actual flow may be affected by upstream water management.

Streamflow Adjustment List For All Forecasts Published In Idaho Basin Outlook Report Streamflow forecasts are projections of runoff volumes that would have occurred naturally without influences from upstream reservoirs or diversions. These values are referred to as natural or adjusted flows. To make these adjustments, changes in reservoir storage, diversions, and interbasin transfers are added or subtracted from the observed (actual) streamflow
volumes. The following list documents the adjustments made to each forecast point in this report.

Panhandle River Basins

KOOTENAI R AT LEONIA, ID
+ LAKE KOOCANUSA (STORAGE CHANGE)

CLARK FORK AT WHITEHORSE RAPIDS, ID
+ HUNGRY HORSE (STORAGE CHANGE)
+ FLATHEAD LAKE (STORAGE CHANGE)
+ NOXON RAPIDS RESV (STORAGE CHANGE)

PEND OREILLE LAKE INFLOW, ID
+ PEND OREILLE R AT NEWPORT, WA
+ HUNGRY HORSE (STORAGE CHANGE)
+ FLATHEAD LAKE (STORAGE CHANGE)
+ NOXON RAPIDS (STORAGE CHANGE
+ PEND OREILLE LAKE (STORAGE CHANGE)

PRIEST R NR PRIEST R, ID
+ PRIEST LAKE (STORAGE CHANGE)

COEUR D'ALENE R AT ENAVILLE, ID - No Corrections

ST. JOE R AT CALDER, ID - No Corrections

SPOKANE R NR POST FALLS, ID
+ COEUR D'ALENE LAKE (STORAGE CHANGE)
+ RATHDRUM PRAIRIE CANAL AT HEUTTER, ID

Clearwater River Basin

DWORSHAK RESERVOIR INFLOW, ID
+ DWORSHAK RESV (STORAGE CHANGE)
- CLEARWATER R AT OROFINO, ID
+ CLEARWATER R NR PECK, ID

CLEARWATER R AT OROFINO, ID - No Corrections

CLEARWATER R AT SPALDING, ID
+ DWORSHAK RESV (STORAGE CHANGE)

Salmon River Basin

SALMON R AT SALMON, ID - No Corrections

SALMON R AT WHITE BIRD, ID - No Corrections

Weiser, Payette, Boise River Basins

WEISER R NR WEISER, ID - No Corrections

SF PAYETTE R AT LOWMAN, ID - No Corrections

DEADWOOD RESERVOIR INFLOW, ID
+ DEADWOOD R BLW DEADWOOD RESV NR LOWMAN
+ DEADWOOD RESV (STORAGE CHANGE)

NF PAYETTE R AT CASCADE, ID
+ CASCADE RESV (STORAGE CHANGE)

NF PAYETTE R NR BANKS, ID
+ CASCADE RESV (STORAGE CHANGE)

PAYETTE R NR HORSESHOE BEND, ID
+ DEADWOOD RESV (STORAGE CHANGE)
+ CASCADE RESV (STORAGE CHANGE)

BOISE R NR TWIN SPRINGS, ID - No Corrections

SF BOISE R AT ANDERSON RANCH DAM, ID
+ ANDERSON RANCH RESV (STORAGE CHANGE)

BOISE R NR BOISE, ID
+ ANDERSON RANCH RESV (STORAGE CHANGE)
+ ARROWROCK RESV (STORAGE CHANGE)
+ LUCKY PEAK RESV (STORAGE CHANGE)

Wood and Lost River Basins

BIG WOOD R AT HAILEY, ID - No Corrections

BIG WOOD R NR BELLEVUE, ID - No Corrections

BIG WOOD R BLW MAGIC DAM NR RICHFIELD, ID
+ MAGIC RESV (STORAGE CHANGE)

LITTLE WOOD R NR CAREY, ID
+ LITTLE WOOD RESV (STORAGE CHANGE)

BIG LOST R AT HOWELL RANCH NR CHILLY, ID - No Corrections

BIG LOST R BLW MACKAY RESV NR MACKAY, ID
+ MACKAY RESV (STORAGE CHANGE)

LITTLE LOST R BLW WET CK NR HOWE, ID - No Corrections

LITTLE LOST R NR HOWE, ID (Disc) - No Corrections

LITTLE LOST R NR HOWE, ID (Disc) - No Corrections

Upper Snake River Basin

HENRYS FORK NR ASHTON, ID
+ HENRYS LAKE (STORAGE CHANGE)
+ ISLAND PARK RESV (STORAGE CHANGE)

HENRYS FORK NR REXBURG, ID
+ HENRYS LAKE (STORAGE CHANGE)
+ ISLAND PARK RESV (STORAGE CHANGE)
+ DIV FM HENRYS FK BTW ASHTON & ST. ANTHONY, ID
+ DIV FM HENRYS FK BTW ST. ANTHONY & REXBURG, ID
+ GRASSY LAKE (STORAGE CHANGE)

FALLS R ABV YELLOWSTONE CANAL NR SQUIRREL, ID
+ GRASSY LAKE (STORAGE CHANGE)

TETON R ABV SO LEIGH CK NR DRIGGS, ID - No Corrections

TETON R NR ST. ANTHONY, ID
- CROSS CUT CANAL
+ SUM OF DIVERSIONS ABV GAGE

SNAKE R NR MORAN, WY
+ JACKSON LAKE (STORAGE CHANGE)

PALISADES RESERVOIR INFLOW, ID
+ SNAKE R NR IRWIN, ID
+ JACKSON LAKE (STORAGE CHANGE)
+ PALISADES RESV (STORAGE CHANGE)

SNAKE R NR HEISE, ID
+ JACKSON LAKE (STORAGE CHANGE)
+ PALISADES RESV (STORAGE CHANGE)

SNAKE R NR BLACKFOOT, ID
+ PALISADES RESV (STORAGE CHANGE)
+ JACKSON LAKE (STORAGE CHANGE)
+ DIV FM SNAKE R BTW HEISE AND SHELLY GAGES
+ DIV FM SNAKE R BTW SHELLY AND BLACKFT, ID

PORTNEUF R AT TOPAZ, ID - No Corrections

AMERICAN FALLS RESERVOIR INFLOW, ID
+ ALL CORRECT MADE FOR HENRYS FK NR REXBURG, ID
+ JACKSON LAKE (STORAGE CHANGE)
+ PALISADES RESV (STORAGE CHANGE)
+ DIV FM SNAKE R BTW HEISE AND SHELLY GAGES
+ DIV FM SNAKE R BTW SHELLY AND BLACKFT GAGES

Southside Snake River Basins

OAKLEY RESERVOIR INFLOW, ID
+ GOOSE CK ABV TRAPPER CK NR OAKLEY, ID
+ TRAPPER CK NR OAKLEY, ID
SALMON FALLS CK NR SAN JACINTO, NV - No Corrections
BRUNEAU R NR HOT SPRINGS, ID - No Corrections
OWYHEE R NR GOLD CK, NV
+ WILDHORSE RESV (STORAGE CHANGE)
OWYHEE R NR OWYHEE, NV
+ WILDHORSE RESV (STORAGE CHANGE)
OWYHEE R NR ROME, OR
+ WILDHORSE RESV (STORAGE CHANGE)
+ JORDAN VALLEY RESV (STORAGE CHANGE)
OWYHEE RESERVOIR INFLOW, OR
+ OWYHEE R BLW OWYHEE DAM, OR
+ OWYHEE RESV (STORAGE CHANGE)
+ DIV TO NORTH AND SOUTH CANALS
SUCCOR CK NR JORDAN VALLEY, OR - No Corrections
SNAKE R - KING HILL, ID - No Corrections
SNAKE R NR MURPHY, ID - No Corrections
SNAKE R AT WEISER, ID - No Corrections
SNAKE R AT HELLS CANYON DAM, ID
+ BROWNLEE RESV (STORAGE CHANGE)

Bear River Basin

BEAR R NR RANDOLPH, UT
+ SULPHUR CK RESV (STORAGE CHANGE)
+ CHAPMAN CANAL DIVERSION
+ WOODRUFF NARROWS RESV (STORAGE CHANGE)
SMITHS FORK NR BORDER, WY - No Corrections
THOMAS FORK NR WY-ID STATELINE - No Corrections
BEAR R AT HARER, ID (Disc.)
+ SULPHUR CK RESV (STORAGE CHANGE)
+ CHAPMAN CANAL DIVERSION
+ WOODRUFF NARROWS RESV (STORAGE CHANGE)
BEAR R BLW STEWART DAM, ID
+ SULPHUR CK RESV (STORAGE CHANGE)
+ CHAPMAN CANAL DIVERSION
+ WOODRUFF NARROWS RESV (STORAGE CHANGE)
+ DINGLE INLET CANAL
+ RAINBOW INLET CANAL
MONTPELIER CK AT IRR WEIR NR MONTPELIER, ID
+ MONTPELIER CK RESV (STORAGE CHANGE)
CUB R NR PRESTON, ID - No Corrections

RESERVOIR CAPACITY DEFINITIONS

Different agencies use various definitions when reporting reservoir capacity and contents. Reservoir storage terms include dead, inactive, active, and surcharge storage. The table below lists these volumes for each reservoir in this report, and defines the storage volumes that NRCS uses when reporting capacity and current reservoir storage. In most cases, NRCS reports usable storage, which includes active and inactive storage.

BASIN/ RESERVOIR	DEAD STORAGE	INACTIVE STORAGE	ACTIVE STORAGE	SURCHARGE STORAGE	NRCS CAPACITY	NRCS FIGURES INCLUDE
PANHANDLE REGION						
HUNGRY HORSE	39.73	--	3451.00	--	3451.0	ACTIVE
FLATHEAD LAKE	Unknown	--	1791.00	--	1971.0	ACTIVE
NOXON RAPIDS	Unknown	--	335.00	--	335.0	ACTIVE
PEND OREILLE	406.20	112.40	1042.70	--	1561.3	DEAD+INACTIVE+ACTIVE
COEUR D'ALENE	--	13.50	225.00	--	238.5	INACTIVE+ACTIVE
PRIEST LAKE	20.00	28.00	71.30	--	119.3	DEAD+INACTIVE+ACTIVE
CLEARWATER BASIN						
DWORSHAK	--	1452.00	2016.00	--	3468.0	INACTIVE+ACTIVE
WEISER/BOISE/PAYETTE BASINS						
MANN CREEK	1.61	0.24	11.10	--	11.1	ACTIVE
CASCADE	--	50.00	653.20	--	703.2	INACTIVE+ACTIVE
DEADWOOD	1.5ρ	--	161.90	--	161.9	ACTIVE
ANDERSON RANCH	29.00	41.00	423.18	--	464.2	INACTIVE+ACTIVE
ARROWROCK	--	--	286.60	--	286.6	ACTIVE
LUCKY PEAK	--	28.80	264.40	13.80	293.2	INACTIVE+ACTIVE
LAKE LOWELL	--	8.00	169.10	--	177.1	INACTIVE+ACTIVE
WOOD/LOST BASINS						
MAGIC	--	--	191.50	--	191.5	ACTIVE
LITTLE WOOD	--	--	30.00	--	30.0	ACTIVE
MACKAY	0.13	--	44.37	--	44.4	ACTIVE
UPPER SNAKE BASIN						
HENRYS LAKE	--	--	90.40	--	90.4	ACTIVE
ISLAND PARK	0.40	--	127.30	7.90	135.2	ACTIVE+SURCHARGE
GRASSY LAKE	--	--	15.18	--	15.2	ACTIVE
JACKSON LAKE	--	--	847.00	--	847.0	ACTIVE
PALISADES	44.10	155.50	1200.00	--	1400.0	DEAD+INACTIVE+ACTIVE
RIRIE	4.00	6.00	80.54	10.00	80.5	ACTIVE
BLACKFOOT	--	--	348.73	--	348.7	ACTIVE
AMERICAN FALLS	--	--	1672.60	--	1672.6	ACTIVE
SOUTHSIDE SNAKE BASINS						
OAKLEY	--	--	77.40	--	77.4	ACTIVE
SALMON FALLS	48.00	--	182.65	--	182.6	ACTIVE
WILDHORSE	--	--	71.50	--	71.5	ACTIVE
OWYHEE	406.83	--	715.00	--	715.0	ACTIVE
BROWNLEE	0.45	444.00	975.30	--	1419.3	INACTIVE+ACTIVE
BEAR RIVER BASIN						
WOODRUFF NARROWS	--	1.50	57.30	--	57.3	ACTIVE
WOODRUFF CREEK	--	4.00	4.00	--	4.0	ACTIVE
BEAR LAKE	--	--	1421.00	--	1421.0	ACTIVE
MONTPELIER CREEK	0.21	--	3.84	--	4.0	DEAD+ACTIVE

Interpreting Streamflow Forecasts

Introduction

Each month, five forecasts are issued for each forecast point and each forecast period Unless otherwise specified, all streamflows are for streamflow volumes that would occur naturally without any upstream influences Water users need to know what the different forecasts represent If they are to use the information correctly when making operational decisions. The following is an explanation of each of the forecasts

Most Probable (50 Percent Chance of Exceeding) Forecast. This forecast is the best estimate of streamflow volume that can be produced given current conditions and based on the outcome of similar past situations There is a 50 percent chance that the streamflow volume will exceed this forecast value. There is a 50 percent chance that the streamflow volume will be less than this forecast value.

The most probable forecast will rarely be exactly right, due to errors resulting from future weather conditions and the forecast equation itself. This does not mean that users should not use the most probable forecast: it means that they need to evaluate existing circumstances and determine the amount of risk they are willing to take by accepting this forecast value.

To Decrease the Chance of Having Too Little Water

If users want to make sure there is enough water available for their operations, they might determine that a 50 percent chance of the streamflow volume being lower than the most probable forecast is too much risk to take. To reduce the risk of not having enough water available during the forecast period, users can base their operational decisions on one of the forecasts with a greater chance of being exceeded (or possibly some point in-between). These include:

70 Percent Chance of Exceeding Forecast. There is a 70 percent chance that the streamflow volume will exceed this forecast value. There is a 30 percent chance the streamflow volume will be less than this forecast value.

90 Percent Chance of Exceeding Forecast. There is a 90 percent chance that the streamflow volume will exceed this forecast value. There is a 10 percent chance the streamflow volume will be less than this forecast value.

To Decrease the Chance of Having Too Much Water

If users want to make sure they don't have too much water, they might determine that a 50 percent chance of the streamflow being higher than the most probable forecast is too much of a risk to take. To reduce the risk of having too much water available during the forecast period, users can base their operational decisions on one of the forecasts with a smaller chance of being exceeded. These include:

30 Percent Chance of Exceeding Forecast. There is a 30 percent chance that the streamflow volume will exceed this forecast value. There is a 70 percent chance the streamflow volume will be less than this forecast value.

10 Percent Chance of Exceeding Forecast. There is a 10 percent chance that the streamflow volume will exceed this forecast value. There is a 90 percent chance the streamflow volume will be less than this forecast value.

Using the forecasts - an example

Using the Most Probable Forecast. Using the example forecasts shown below, users can reasonably expect 36,000 acre-feet to flow past the gaging station on the Mary's River newa Deeth between March 1 and July 31

Using the Higher Exceedance Forecasts. If users anticipate a somewhat drier trend in the future (monthly and seasonal weather outlooks are available from the National Weather Service every two weeks), or if they are operating at a level where an unexpected shortage of water could cause problems, they might want to plan on receiving only 20,000 acre-feet (from the 70 percent chance of exceeding forecast). In seven out of ten years with similar conditions, streamflow volumes will exceed the 20,000 acre-foot forecast

If users anticipate extremely dry conditions for the remainder of the season, or if they detrmine the risk of using the 70 percent chance of exceeding forecast is too great, then they might plan on receiving only 5000 acre-feet (from the 90 percent chance of exceeding forecast). Nine out of ten years with similar conditions, streamflow volumes will exceed the 5000 acre-foot forecast

Using the Lower Exceedance Forecasts. If users expect wetter future conditions, or if the chance that five out of every ten years with similar conditions would produce streamflow volumes greater that 36,000 acre-feet was more than they would like to risk, they might plan on receiveing 52,000 acre-feet (from the 30 percent chance of exceeding forecast) to minimize potential flooding problems Three out of ten years with similar conditions, streamflows will exceed the 52,000 acre-foot forecast.

In years when users expect extremely wet conditions for the remainder of the season and the threat of severe flooding and downstream damage exists, they might choose to use the 76,000 acre-foot (10 percent chance of exceeding) forecast for their water management operations. Streamflow volumes will exceed this level only one year out of ten.

UPPER HUMBOLDT RIVER BASIN

STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	<-----DRIER-----FUTURE CONDITIONS-----WETTER-----> Chance of Exceeding 90% (1000AF)	70% (1000AF)	50% (Most Probable) (1000AF)	(% AVG)	30% (1000AF)	10% (1000AF)	25 YR (1000AF)
MARY'S RIVER	MAR-JUL	5.0	20.0	36	77	52	76	47
nr Deeth	APR-JUL	8.0	17.0	31	74	45	67	42
LAMOILLE CREEK	MAR-JUL	6.0	16.0	24	79	32	43	31
nr Lamoille	APR-JUL	4.0	15.0	22	75	30	41	30
NR HUMBOLDT RIVER	MAR-JUL	6.0	12.0	43	73	74	121	59
at Devils Gate								

For more information concerning streamflow forecasting ask your local NRCS field office for a copy of "A Field Office Guide for Interpreting Streamflow Forecasts".

AN EQUAL OPPORTUNITY EMPLOYER

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